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REMARKS

I. Introductory Remarks

This is a full and timely response to the outstanding non-final Office Action mailed April 17, 2006. Through this response claims 1, 5 and 8-15 have been amended, and claims 16-74 are canceled. Claims 75-77 are newly added. Claims 1-15 and 75-77 are pending in the present Application. In view of the following remarks, reconsideration and allowance of the Application and presently pending claims are respectfully requested.

II. Amendments to the Specification

The specification has been amended on page 17 to correct typographical errors. No new matter has been added through this amendment.

III. Response to Rejection of Claims 10-11 Under 35 U.S.C. § 103(a)

A. Status of Claims 10-11

Claims 10-11 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 6,181,985 to O'Donnell, et al., hereinafter referenced as O'Donnell, in view of U.S. Publication No. 2004/0138786 to Blackett, et al., hereinafter referenced as Blackett.

Applicant respectfully traverses these rejections. Applicant has amended independent claim 10 to more clearly indicate that the on-premise processor receives a message request from a power load controller, and thus, the discussion below addresses the Office Action arguments in the context of the amended independent claim 10. Also, Applicant has amended dependent claim 11 to correct a minor typographical error.

B. <u>Discussion of the Rejection</u>

As has been acknowledged by the Court of Appeals for the Federal Circuit, the U.S. Patent and Trademark Office ("USPTO") has the burden under section 103 to establish a prima facie case of obviousness by showing some objective teaching in the prior art or generally available knowledge of one of ordinary skill in the art that would lead that individual to the claimed invention. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). The Manual of Patent Examining Procedure (MPEP) section 2143 discusses the requirements of a

prima facie case for obviousness. That section provides as follows:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In the present case, it is respectfully asserted that a *prima facie* case for obviousness has not been established.

Independent claim 10, as amended, recites:

10. A method for energy management comprising:

- receiving at an on-premise processor a first request message from a power load controller pertaining to energy rating data, wherein the first request message is communicated using a wireless communication link, the wireless communication link relaying the first request message through at least one other power load controller;
- sending from the on-premise processor a second request message over a distribution network to the host processor, the second request message pertaining to energy rating data;
- receiving at the on-premise processor a first rating response message over the distribution network from the host processor, the first rating response message including energy rating data;
- sending from the on-premise processor to the power load controller a second rating response message using the wireless communication link, the second rating response message including the energy rating data; and
- determining in the power load controller whether to generate an activation signal based at least in part on the energy rating data.

(Emphasis added.)

Applicant respectfully submits that the combination of O'Donnell and Blackett does not disclose,

teach or suggest the emphasized features as highlighted in independent claim 10 above. More specifically, the combination of O'Donnell and Blackett does not disclose, teach or suggest "receiving at an on-premise processor a first request message from a power load controller pertaining to energy rating data, wherein the first request message is communicated using a wireless communication link, the wireless communication link relaying the first request message through at least one other power load controller," and "sending from the on-premise processor a second request message over a distribution network to the host processor, the second request message pertaining to energy rating data" as highlighted in the amended independent claim 10 above.

It is acknowledged in the Office Action that O'Donnell "does not explicitly teach utilizing 802.15.4-based wireless communication links." Office Action, page 3. However, it is asserted in the Office Action that O'Donnell discloses "receiving at an on-premise processor a first request from a power load controller pertaining to energy rating data," Office Action, page 2. Applicant respectfully disagrees with this characterization of O'Donnell. Specifically, O'Donnell recites:

The load may be shed or disconnected from the power grid based upon rate information transmitted from the power supplier and a desired shedding threshold selected by the operator. Voltage is continuously monitored for selectively connecting the load from the power grid if the available voltage is above or below associated thresholds, thereby protecting the load from Over-or under-voltage conditions.

O'Donnell, column 6, lines 14-20. (Emphasis added.)

As indicated in the highlighted portions above, O'Donnell appears arguendo, to teach continuously monitoring voltage for connecting a load if the voltage is above or below a given threshold. Further, O'Donnell teaches that rate tier information is "sent by the utility power supplier to gateway module 16 (FIG. 1) and by module 16 to module 18." O'Donnell column 5, lines 7-9. These communications are both transmitted in the direction of the load. Further, the gateway module may "command the module to upload status information, and power and energy consumption information." O'Donnell, column 5, lines 53-55. Thus, the load shed module

operates in response to requests or commands by the gateway module.

Further, O'Donnell teaches that the gateway module "provides both power and rate information to a plurality of load shed modules," and that in general "the purpose of the gateway module 16 is to communicate with utility power supplier 12 ... to communicate power rate tier information to modules 18, 20, 22 ... and to receive status and usage information from modules 18-22 and transmit such information as required to utility power supplier 12." O'Donnell, column 3, lines 14-33. O'Donnell appears arguendo, to teach that the gateway module responds to requests or commands from the power supplier and that the load shed module responds to requests or commands from the gateway module. There is, however, no discussion either of the gateway module receiving a request from the load shed module or of the gateway module requesting information from the utility power supplier. Even if, arguendo, O'Donnell teaches connecting or disconnecting a load based upon rate information, there is no discussion of "receiving at an on-premise processor a first request message from a power load controller pertaining to energy rating data, wherein the first request message is communicated using a wireless communication link, the wireless communication link relaying the first request message through at least one other power load controller," and "sending from the on-premise processor a second request message over a distribution network to the host processor, the second request message pertaining to energy rating data." Neither does Blackett remedy this deficiency.

It is asserted in the Office Action that *Blackett* teaches "a system which utilizes electronic devices to monitor, measure and control power system parameters in an energy management system ... whereby 802.11b compliant networking may be utilized to transmit data." *Office Action, page 3*. Applicant respectfully disagrees with this characterization of *Blackett*. Specifically, *Blackett* teaches "the capability to monitor and control attached slave devices." *Abstract, lines 4-5*. There is no discussion that the slave devices request information from master devices such as data gathering devices or power distribution devices. *Blackett* further recites:

The communication software applications further include support for master protocols, also known as a master/slave protocols, which use a master device or application to control a network of slave devices. A master/slave protocol interaction typically involves the master initiating transactions and the

slaves responding with the requested data or action. Slave devices are both legacy and modern devices which typically do not have their own capability to communicate on the power management architecture. However, it can be appreciated that a slave device may also be another IED, such as an energy meter, with the capability to communicate on the power management architecture, but which operates in a slave mode.

Blackett, paragraph 0042. (Emphasis added.)

As indicated in the highlighted text above, *Blackett* appears to teach a master/slave protocol interaction whereby the master initiates transactions and the slaves respond with the requested data. There is no discussion regarding the slave devices acting beyond the capability of responding to requests from the master devices and thus no suggestion that the master receives from the slave device a request message pertaining to energy rating data or any other type request.

Further, Blackett teaches that "the master device" gathers "data from slave devices" by continuous polling or upon receiving a command from a viewing device such as a web browser. Blackett, paragraphs 0074-0075. There is no indication that the master device requests data such as energy rating data from a power supply side host processor. Rather, the master device collects data from load side slave devices. In fact, Blackett emphasizes that the master device typically "has the data requested available, having already retrieved it from the slave device." Blackett, paragraph 43. Thus the intent appears to be the gathering of data from load side devices such as the slaves. Even if, arguendo, Blackett teaches utilizing 802.11b compliant networking to transmit data, there is no discussion of "receiving at an on-premise processor a first request message from a power load controller pertaining to energy rating data, wherein the first request message is communicated using a wireless communication link, the wireless communication link relaying the first request message through at least one other power load controller," and "sending from the on-premise processor a second request message over a distribution network to the host processor, the second request message pertaining to energy rating data."

Thus, the proposed combination of O'Donnell and Blackett fails to disclose, teach or suggest the features of independent claim 10, as amended. Because independent claim 10 is

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allowable over the proposed combination, dependent claim 11 is allowable as a matter of law for at least the reason that dependent claim 11 contains all elements, features and limitations of independent claim 10. See, e.g., In re Fine, 837 F.2d 1071 (Fed. Cir. 1988).

In summary, it is Applicant's position that a *prima facie* case for obviousness has not been made against Applicant's claims 10 and 11. Therefore, it is respectfully submitted that each of these claims is patentable over *O'Donnell* in view of *Blackett* and that the rejection of these claims should be withdrawn.

IV. Response to Rejection of Claims 1-2, 4-5 and 6-7 Under 35 U.S.C. § 103(a)

A. Status of Claims 1-2, 4-5 and 6-7

Claims 1-2, 4-5 and 6-7 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over O'Donnell, in view of U.S. Patent No. 5,644,173 to Elliason, et al., hereinafter referenced as Elliason, and further in view of Blackett. Applicant respectfully traverses these rejections. Applicant has amended independent claim 1 to more clearly indicate that the onpremise processor receives a message request from a power load controller. Thus the discussion below addresses the Office Action arguments in the context of the amendment to claim 1.

B. Discussion of the Rejection

In the present case, it is respectfully asserted that a *prima facie* case for obviousness has not been established.

Independent claim 1, as amended, recites:

1. A method for energy management comprising:

receiving energy rating data at an on-premise processor transmitted by a distribution network from a host processor and storing the energy rating data in a memory, the rating data including a schedule pertaining to time and energy costs;

receiving at the on-premise processor a message from a power load controller requesting energy rating data, wherein the message is communicated using a wireless communication link, the wireless communication link relaying the message through at least one other power load controller; retrieving the energy rating data from the memory and sending a response message including the energy rating data using the wireless

> communications link from the on-premise processor to the power load controller; and determining in the power load controller whether to generate an activation signal based at least in part on the energy rating data.

(Emphasis added.)

Applicant respectfully submits that O'Donnell in view of Elliason, and further in view of Blackett does not disclose, teach or suggest the emphasized features as highlighted in independent claim 1 above. More specifically, the combination of O'Donnell, Elliason, and Blackett does not disclose, teach or suggest "receiving at the on-premise processor a message from a power load controller requesting energy rating data, wherein the message is communicated using a wireless communication link, the wireless communication link relaying the message through at least one other power load controller" as highlighted in the amended independent claim 1 above.

It is acknowledged in the Office Action that O'Donnell does not "teach that the rating data includes a schedule pertaining to time and energy costs, nor that messages are communicated using an 802.15.4-based wireless communication link." Office Action, page 4. However, it is asserted in the Office Action that Elliason "teaches a method for energy management load add/shed control modules which control adding and shedding of loads based on received price tier information including time and energy cost data." Office Action, page 4. Specifically, *Elliason* recites:

The controller sends price tier information to the individual controllers for the add/shed loads (also called subsystems). Each of these contain information indicating the appropriate action that the load should take based on whether there is a user override and whether there is direct utility control as well as on tier information.

Elliason, column 2, lines 2-7. (Emphasis added.)

As indicated in the highlighted text above, Elliason appears, arguendo, to teach a system in which a utility supplier side controller manages the load side devices. Even if, arguendo,

Elliason "teaches a method for energy management load add/shed control modules which control adding and shedding of loads based on received price tier information including time and energy cost data," there is no mention of the controller receiving a request for price tier information or other energy rating data from the individual controller at the load. As argued above regarding independent claim 10, neither O'Donnell nor Blackett remedy this deficiency.

Thus, the proposed combination of O'Donnell, Elliason and Blackett fails to disclose, teach or suggest the features of independent claim 1, as amended. Because independent claim 1 is allowable over the proposed combination, dependent claims 2, 4-5 and 6-7 are allowable as a matter of law for at least the reason that dependent claims 2, 4-5 and 6-7 contain all elements, features and limitations of independent claim 1. See, e.g., In re Fine, 837 F.2d 1071 (Fed. Cir. 1988).

In summary, it is Applicant's position that a *prima facie* case for obviousness has not been made against Applicant's claims 1-2, 4-5 and 6-7. Therefore, it is respectfully submitted that each of these claims is patentable over *O'Donnell* in view *Elliason*, and further in view of *Blackett* and that the rejection of these claims should be withdrawn.

V. Response to Rejection of Claims 8-9 Under 35 U.S.C. § 103(a)

A. Status of Claims 8-9

Claims 8-9 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over O'Donnell, in view of U.S. Patent No. 5,644,173 to Elliason, et al., hereinafter referenced as Elliason, and further in view of Blackett. Applicant respectfully traverses these rejections. Applicant has amended claim 8 to more clearly indicate that the message request from the appliance utilizes a wireless communication link. Thus the discussion below addresses the Office Action arguments in the context of the amended claim 8. Also, Applicant has amended dependent claim 9 to correct a minor typographical error.

B. <u>Discussion of the Rejection</u>

In the present case, it is respectfully asserted that a *prima facie* case for obviousness has not been established.

Independent claim 8, as amended, recites:

8. A method for energy management, comprising:

sending an energy rate request message from an appliance, wherein the request message is communicated using a wireless communication link, the wireless communication link relaying the message through at least one other appliance;

receiving an energy rate schedule at the appliance using the wireless communication link, the energy rate schedule comprising a first time period for a first usage rate and a second time period for a second usage rate; and

determining in the appliance whether to activate a power load based in part on the energy rate schedule and a current time.

(Emphasis added.)

Applicant respectfully submits that O'Donnell in view of Elliason, and further in view of Blackett does not disclose, teach or suggest the emphasized features as highlighted in independent claim 8 above. More specifically, the combination of O'Donnell, Elliason, and Blackett does not disclose, teach or suggest "sending an energy rate request message from an appliance, wherein the request message is communicated using a wireless communication link, the wireless communication link relaying the message through at least one other appliance" as highlighted in the amended independent claim 8 above.

It is acknowledged in the Office Action that O'Donnell does not teach "that the energy rate schedule comprises a first time period for a first usage rate and a second time period for a second usage rate, that activation is based in part on a current time, nor that messages are sent using 802.15.4-based wireless communication links." Office Action, page 7. Further, and as argued above regarding independent claims 1 and 10, O'Donnell appears arguendo, to teach that a load side module responds to requests or commands from a gateway module between the load and the power supplier. There is, however, no discussion of a load side device such as a load shed module or an appliance requesting information from a gateway module that operates between the load and the power supplier.

It is further asserted in the Office Action, that Elliason teaches:

... energy management load add/shed control modules which control adding and shedding of loads based on received price tier information including time and energy cost data (... whereby it is noted that price tier information would include pricing for various times and whereby the controllers add or shed loads utilizing a controller which compares tier schedules to existing conditions which would include time).

Office Action, pages. 7-8.

However, as argued above regarding independent claim 1, *Elliason* appears, *arguendo*, to teach a system in which a power supplier side controller manages the load side devices, and where the load side devices do not request information from the power supplier side devices. Even if, *arguendo*, *Elliason* teaches energy management load control modules which control loads based on received price tier information that includes time and energy cost data, including pricing for various times, there is no discussion of sending an energy rate request, or any other type request message, from a load side device to obtain energy rate information or any other type information from the power supplier.

It is further asserted in the Office Action, that Blackett teaches a system which utilizes intelligent electronic devices to monitor, measure and control power system parameters in an energy management system ... whereby 802.11b compliant networking may be utilized to transmit data." Office Action, page 8. As argued above regarding independent claim 10, Blackett appears to teach a master/slave protocol interaction whereby the master initiates transactions and the slaves respond with the requested data, with the apparent intent to be the gathering of data from load side devices such as the slaves. Even if, arguendo, Blackett teaches utilizing 802.11b compliant networking to transmit data, there is no discussion of sending an energy rate request message, or any other type message, from a load side device to obtain energy rate information or any other type information from the power supplier.

Thus, the proposed combination of O'Donnell, Elliason and Blackett fails to disclose, teach or suggest "sending an energy rate request message from an appliance, wherein the request message is communicated using a wireless communication link, the wireless communication link relaying the message through at least one other appliance," as in the amended independent claim 8. Because independent claim 8 is allowable over the proposed combination, dependent claim 9

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is allowable as a matter of law for at least the reason that dependent claim 9 contains all elements, features and limitations of independent claim 8. See, e.g., In re Fine, 837 F.2d 1071 (Fed. Cir. 1988).

In summary, it is Applicant's position that a *prima facie* case for obviousness has not been made against Applicant's claims 8 and 9. Therefore, it is respectfully submitted that each of these claims is patentable over O'Donnell in view Elliason, and further in view of Blackett and that the rejection of these claims should be withdrawn.

VI. Response to Rejection of Claims 13-15 Under 35 U.S.C. § 103(a)

A. Status of Claims 13-15

Claims 13-15 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over O'Donnell, in view Elliason, and further in view of Blackett. Applicant respectfully traverses these rejections. Also, Applicant has amended dependent claims 13-15 to correct minor typographical errors.

B. Discussion of the Rejection

In the present case, it is respectfully asserted that a *prima facte* case for obviousness has not been established.

Applicant respectfully submits that because independent claim 10 is allowable, as argued above, dependent claims 13-15 are allowable as a matter of law for at least the reason that dependent claims 13-15 contain all elements, features and limitations of independent claim 10. See, e.g., In re Fine, 837 F.2d 1071 (Fed. Cir. 1988).

In summary, it is Applicant's position that a *prima facie* case for obviousness has not been made against Applicant's claims 13-15. Therefore, it is respectfully submitted that each of these claims is patentable over *O'Donnell* in view *Elliason*, and further in view of *Blackett* and that the rejection of these claims should be withdrawn.

Response to Rejection of Claim 12 Under 35 U.S.C. § 103(a) VII.

Status of Claim 12

Claim 12 has been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over O'Donnell, in view of Blackett, and further in view of U.S. Patent No. 6,281,601 to Edelman, et al., hereinafter referenced as Edelman. Applicant respectfully traverses these rejections. Applicant has amended claim 10, and thus the discussion below addresses the Office Action arguments in the context of the claim amendment. Also, Applicant has amended dependent claim 12 to correct a minor typographical error.

B. Discussion of the Rejection

In the present case, it is respectfully asserted that a prima facie case for obviousness has not been established.

As argued above, independent claim 10 is allowable because the combination of O'Donnell and Blackett fails to disclose, teach or suggest "receiving at an on-premise processor a first request message from a power load controller pertaining to energy rating data, wherein the first request message is communicated using a wireless communication link, the wireless communication link relaying the first request message through at least one other power load controller," and "sending from the on-premise processor a second request message over a distribution network to the host processor, the second request message pertaining to energy rating data." Neither does Edelman remedy this deficiency.

It is asserted in the Office Action that Edelman teaches the "activation of a power generator based on a utility rate schedule." Office Action, page 10. Even if, arguendo, Edelman teaches the activation of a power generator after receiving a utility rate schedule, there is no discussion of a load side device sending any type request message for obtaining energy rating data, nor of an intermediate device, such as an on-premise processor sending any type request message to a host processor operating for the power supplier.

Thus, the combination of O'Donnell, Blackett and Edelman fails to disclose, teach or suggest the above-emphasized features of independent claim 10. Applicant respectfully submits that because independent claim 10 is allowable, as argued above, dependent claim 12 is allowable as a matter of law for at least the reason that dependent claim 12 contain all elements,

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features and limitations of independent claim 10. See, e.g., In re Fine, 837 F.2d 1071 (Fed. Cir. 1988).

In summary, it is Applicant's position that a *prima facie* case for obviousness has not been made against Applicant's claim 12. Therefore, it is respectfully submitted that this claims is patentable over *O'Donnell* in view *Blackett*, and further in view of *Edelman* and that the rejection of this claim should be withdrawn.

VIII. Response to Rejection of Claim 3 Under 35 U.S.C. § 103(a)

A. Status of Claim 3

Claim 3 has been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over O'Donnell, in view of Elliason, further in view of Blackett, and further in view of Edelman. Applicant respectfully traverses these rejections. Applicant has amended claim 1, and thus the discussion below addresses the Office Action arguments in the context of the claim amendment.

B. Discussion of the Rejection

In the present case, it is respectfully asserted that a *prima facie* case for obviousness has not been established.

As argued above, independent claim 1 is allowable because the proposed combination of O'Donnell, Elliason and Blackett fails to disclose, teach or suggest the features of independent claim 1, as amended. Neither does Edelman remedy this deficiency.

It is asserted in the Office Action that *Edelman* teaches the "activation of a power generator based on a utility rate schedule." *Office Action, page 10.* Even if, *arguendo*, *Edelman* teaches the activation of a power generator after receiving a utility rate schedule, there is no discussion of a load side device sending any type request message for obtaining energy rating data, nor of an intermediate device, such as an on-premise processor sending any type request message to a host processor operating for the power supplier.

Thus, the combination of O'Donnell, Elliason, Blackett and Edelman fails to disclose, teach or suggest the above-emphasized features of independent claim 1. Applicant respectfully submits that because independent claim 1 is allowable, as argued above, dependent claim 3 is allowable as a matter of law for at least the reason that dependent claim 3 contains all elements.

features and limitations of independent claim 1. See, e.g., In re Fine, 837 F.2d 1071 (Fed. Cir. 1988).

In summary, it is Applicant's position that a *prima facie* case for obviousness has not been made against Applicant's claim 3. Therefore, it is respectfully submitted that this claim is patentable over the combination of O'Donnell, Elliason, Blackett and Edelman, and further in view of Edelman and that the rejection of this claim should be withdrawn.

IX. New Claims

Upon entry of the amendments in this response, claims 75-77 have been added.

Applicant respectfully asserts that no new matter has been added and that these dependent claims are in condition for allowance because they depend from allowable independent claims.

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CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1-15 and 75-77, are in condition for allowance. Favorable consideration and allowance of the present Application and all pending claims are hereby courteously requested.

If, in the opinion of the Examiner, there are any issues that can be resolved by telephone conference, or if there are any informalities that may be addressed by an Examiner's amendment, the Examiner is invited to call the undersigned attorney at (404) 233-7000.

The Commissioner is hereby authorized to charge any fees due, or credit any overpayment, to Deposit Account No. 50-3537.

Respectfully submitted

Reg. No. 51,128

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Morris, Manning and Martin, LLP 1600 Atlanta Financial Center 3343 Peachtree Road, N.E. Atlanta Georgia 30326 404-233-7000 Main 404-365-9532 Facsimile

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